PUBLICATIONS

OF THE

NIZAMIAH OBSERVATORY.

VOLUME XIII. PART 1.

UNDER THE DIRECTION OF

T. P. BHASKARAN, M.A., F.R.A.S.





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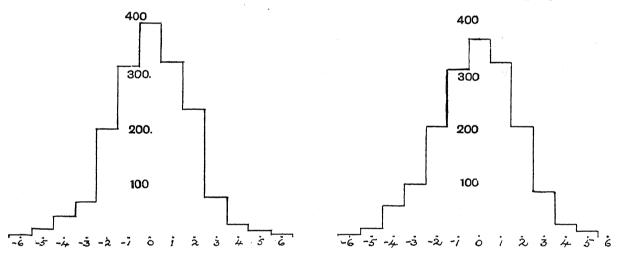
REVISED VALUES OF THE CONSTANTS OF PLATES TAKEN FOR THE ASTROGRAPHIC CATALOGUE. ZONES +39° to +36°.

The measures of the rectangular Co-ordinates of star images on the Hyderabad plates in the "Carte du Ciel" Zones $+39^{\circ}$ to $+36^{\circ}$ have been published in the four volumes of the Hyderabad Astrographic Catalogue, Vols. IX. to XII. At the heading of each plate are given the provisional values of the Constants A, B, C, D, E, F required for computing the standard Co-ordinates (ξ, η) of the stars from the printed rectangular Co-ordinates (x, y); the formulæ adopted being

$$\xi = x - 13 - Ax - By - C,$$

 $\eta = y - 13 - Dx - Ey - F.$

The Constants were derived from a comparison of the measures of the étoiles de repère on the Hyderabad plates with the positions given in the Lund A.G. Catalogue. The Lund observations were made mostly between 1880 and 1890; and thus there is an interval of nearly forty-five years between these observations and the epoch of the photographs of the Hyderabad series. During the progress of



the work it was noticed that Prager's Catalogue¹ contains very recent positions of a good number of the reference stars, and it was considered desirable to revise the computation of the plate Constants using the positions in that Catalogue. The revised values of the Constants are given in the following pages. The residuals Δx , Δy are, except in the case of stars of large proper motion, throughout very small—much smaller than those obtained from the Lund positions. The mean deviation of the residuals for stars in the first two hours of R.A. derived from both sets of reductions are given below for comparison.

	$\Delta \alpha$	$\Delta\delta$	No. of Stars.
Lund	1".34	o"·79	1657
Prager	o″·54	o″·45	1710

The distribution of the residuals for the reference stars in R.A. 0^h to 6^h is exhibited in the diagram.

¹ Veröffentlichungen der Universitätssternwarte zu Babelsberg, Band iv.

The tables in the following pages are self-explanatory; it is suggested that these revised values may be substituted in the place of those printed at the heading of the measures of each plate in the published volumes of the Astrographic Catalogue.

Differences (Hyderabad—Prager) of over 1"·8 in either Co-ordinate are given in Table V.; and the last section contains brief notes on some of the stars with abnormal residuals.

T. P. BHASKARAN.

NIZAMIAH OBSERVATORY, HYDERABAD (DECCAN), 1942 August 21.

R.A.	Plate No.	A	В	С	D	E	F
h m							
0 5	2646	+0.00101	-0.00410	-0.1773	+0.00395	+0.00088	+0.3441
	2647	+0.00082	- 0.00446	-0.3462	+0.00438	+0.00067	+0.2366
0 15				-0.1418	+0.00048	+0.00082	+0.0601
0 25	2640	+0.00085	- 0.00036	•		+0.00057	+0.3716
0 35	2648	+0.00073	- 0.00305	-0.1927	+0.00302		
0 45	2666	+0.00092	-0.00273	- 0.2967	+0.00276	+0.00082	+0.2070
	2641	+0i00074	-0.00011	-0.2959	-0.00001	+0.00083	+0.4414
0 55			-0.00126	- 0.2965	+0.00133	+0.00056	+0.4006
I 5	2650	+0.00083				+0.00093	+0.5354
1 15	2651	+0.00093	- 0.00056	-0.1570	+0.00056		
I 25	2642	+0.00088	-0.00612	-0.2724	+0.00604	+0.00068	+0.0976
I 35	2652	+0.00080	-0.00164	-0.2333	+0.00160	+0.00072	+0.2359
	2653	+0.00084	-0.00337	-0.0919	+0.00348	+0.00076	+0.3028
10		+0.00031	-0.00392	-0.1971	+0.00396	+0.00076	+0.4985
1 55	2654	_			-0.00742	+0.00090	+0.4613
25	2655	+0.00101	+0.00738	-0.3491		+0.00068	-0.0567
2 15	2660	+0.00076	+0.00270	-0.1906	-0.00272		
2 25	2657	+0.00087	-0.00184	-0.2222	+0.00186	+0.00078	+0.2701
2 35	2661	+0.00084	-0.00050	-0.2842	+0.00045	+0.00076	+0.2188
	2662	+0.00081	-0.00023	-0.2792	+0.00015	+0.00090	+0.3142
2 45	L				+0.00086	+0.00071	+0.3576
2 55	2658	+0.00094	-0.00097	-0.2679		+0.00080	+0.3328
3 5	2663	+0.00100	+0.00003	-o·3488	+0.00014		
3 15	2664	+0.00093	+0.00285	-0.2417	-0.00309	+0.00071	+0.3336
	2669	+0.00078	+0.00337	- o·5078	-0.00342	+0.00070	+0.4693
3 25				-0.3739	-0.00154	+0.00060	+0.3276
3 35	2670	+0.00081	+0.00144		-0.00193	+0.00074	+0.1517
3 45	2681	+0.00082	+0.00163	-0.2019		+0.000/4	+0.2520
3 55	2682	+0.00092	-0.00448	-0.2005	+0.00427		
4 5	2683	+0.00085	+0.00271	-0.1772	-0.00265	+0.00067	+0.3224
	2684	+0.00078	-0.00143	-0.2648	+0.00126	+0.00078	+0.2062
4 15		+0.00078	+0.00040	-0.2435	- 0.00064	+0.00073	+0.4045
4 25	2689			-0.3413	-0.00076	+0.00073	+0.3873
4 35	2685	+0.00083	+0.00088			+0.00001	+0.3704
4 45	2694	+0.00084	+0.00204	-0.2444	-0.00224		103/04
4 55	2686	+0.00089	+0.00034	-0.3300	- 0.00045	+0.00080	+0.4559
	2690	+0.00080	-0.00295	-0.2896	+0.00284	+0.00073	+0.1832
5 5			+0.00053	-0.1890	- 0.00065	+0.00075	+0.2756
5 15	2695	+0.00089			-0.00394	+0.00082	+0.3494
5 25	2696	+0.00076	+0.00394	-0.4572		+0.00074	+0.0274
5 35	2701	+0.00087	-0.00285	-0.2417	+0.00275		+0.2328
5 45	2691	+0.00099	+0.00231	+0.1100	-0.00271	+0.00069	1
	2697	+0.00083	-0.00123	-0.3367	+0.00111	+0.00085	+0.3401
5 55		+0.00031	+0.00106	-0.1951	-0.00113	+0.00083	+ 0.4376
6 5	2704	1	+0.00069	-0.2489	- 0.00069	+0.00102	+0.3776
6 15	2698	+0.00089			-0.00730	+0.00083	+0.3132
6 25	2705	+0.00082	+0.00705	-0.5701			+0.3165
6 35	2692	+0.00072	+0.00412	+0.3647	- 0.00432	+0.00070	
	2706	+0.00085	+0.00100	-0.3361	-0.00097	+0.00094	+0.2211
6 45			+0.00197	-0.3517	-0.00203	+0.00088	+0.3331
6 55	2712	+0.00077		-0.3947	-0.00325	+0.00070	+0.3383
75	2707	+0.00093	+0.00334			+0.00072	+0.5275
7 15	2713	+0.00087	+0.00231	-0.2626	-0.00236		+0.2750
7 25	2718	+0.00000	+0.00233	-0.3529	-0.00254	+0.00086	1
	2708	+0.00100	+0.00431	-0.4177	- 0.00436	+0.00072	+ 0.4593
7 35			+0.00276	-0.1779	-0.00277	+0.00089	+0.3934
7 45	2719	+0.00100	+0.00028	-0.1890	-0.00029	+0.00070	+0.6622
7 55	2720	+0.00075		-0.3006	-0-00040	+0.00089	+0.3325
8 5		+0.00102	+0.00046			+0.00086	+0.4421
8 15	2542	+0.00087	-0.00119	- 0.2836	+0.00130		
		+0.00103	+0.00177	-0.3684	-0.00185	+0.00087	+0.4394
		+0.00074	-0.00809	-0.1639	+0.00816	+0.00076	+0.3414
8 35		1	+0.00460	-0.3398	-0.00442	+0.00060	+0.6102
8 45		+0.00075	- 0.00089	-0.3162	+0.00110	+0.00080	+0.5310
8 55		+0.00094			-0.00045	+0.00064	+0.3152
9 5	2548	+0.00077	+0.00050	-0.2305			1
9 15		+0.00086	+0.00263	-0.3155	-0.00250	+0.00053	+0.4151
		+0.00094	-0.00444	-0.3036	+0.00434	+0.00066	+0.2675
9:25		+0.00081	+0.00092	+0.7735	-0.00082	+0.00080	+0.4809
9 35			l .	-0.3794	-0.00243	+0.00076	+0.4193
9 45		+0.00078	+0.00235		-0.00156	+0.00097	+0.3487
9 55	3330	+0.00078	+0.00130	-0.3496			
10 5	2554	+0.00098	+0.00028	-0.1702	-0.00012	+0.00073	+0.3008
10 15		+0.00077	0.00020	-0.0498	+0.00022	+0.00069	+0.2956
10 25		+0.00099	- o·oo686	-0.2491	+0.00673	+0.00076	+0.4105
		+0.00097	+0.00104	-0.3301	-0.00102	+0.00064	+0.4256
10 35			+0.00018	-0.2984	-0.00005	+0.00057	+0.3473
10 45	1	+0.00078					+0.3953
10 55	2552	+0.00070	+0.00051	-0.0674	-0.00032	+0.00064	
11 5		+0.00083	-0.00242	-0.4915	+0.00211	+0.00086	+0.1391
Ū		+0.00091	-0.00052	-0.2977	+0.00065	+0.00084	+0.5254
11 15		1	-0.00562	-0.1576	+0.00560	+0.00091	+0.3794
11 25		+0.00101		-0.1156	-0.00090	+0.00093	+0.5063
II 35	2570	+0.00090	+0.00096	- I			
	1	+0.00097	-0.00075	-0.3394	+0.00095	+0.00088	+0.3823
TT 4 =	' ' '-	+0.00084	-0.00500	-0.1372	+0.00481	+0.00088	+0.4145
II 45		1 0 00004			+0.00356	+0.00090	+0.2611
11 55		T 0.0000	- 0.003 20	-0.2353	1000110		
11 55 12 5	2571	+0.00095	- 0.00350 - 0.00655	-0.2353 -0.1355		+0.00083	+0.2445
11 55	2571 2585	+0.00095 +0.00080 +0.00083	- 0.00350 - 0.00655 - 0.00401	-0·1355 -0·2021	+0.00653 +0.00398		

	,	A	В	C	D	E	F
h m							
12 35	2858	+0.00084	-0.00236	-0.2433	+0.00235	+0.00068	+0.3302
12 45	2591	+0.00085	- o·oo567	-0.2708	+0.00566	+0.00079	+0.3055
12 55	2588	+0.00065	- 0. 00096	-0.0614	+0.00095	+0.00058	+0.6074 +0.3825
13 5	2592	+0.00109	-0.00758	-0.2043	+0.00762	+0.00071 +0.00077	+0.1962
13 15	2589	+0.00078	- 0·00724	-0.1854	+0.00714		-
13 25	2594	+0.00096	-0.00391	-0.1341	+0.00388	+0.00078	+0.4500
13 35	2593	+0.00063	-0.00322	-0.0887	+0.00321	+0·00072 +0·00091	+0.3454
I3 45	2590	+0.00110	-0.00632	+ 0·0489 + 0·0875	+0.00625 +0.00423	+0.00091	+ 0·3595 + 0·4579
13 55 14 5	2595	+0·00090 +0·00072	- 0·00416 - 0·00447	-0.1974	+0.00423	+0.00063	+0.3092
	2597					+0.00051	
14 15	2864	+0.00095	-0.01030 -0.00829	-0.0736 -0.1319	+0.01029 +0.00835	+0.00021	+0·3614 +0·1485
I4 25 I4 35	2598 2599	+0.00069 +0.00074	- 0·00078	-0.2725	+0.00092	+0.00065	+0.3696
14 45	2600	+0.00075	- o·oo688	-0.1395	+0.00709	+0.00064	+0.3870
I4 55	2601	+0.00067	-0.00466	-0.0007	+0.00476	+0.00062	+0.4119
15 5	2879	+0.00052	-0.00862	-0.1212	+0.00861	+0.00070	+0.3239
15 15	2883	+0.00058	-0.00047	-0.4991	+0.00049	+0.00066	+0.4491
15 25	2880	+0.00076	-0.00400	-0.1577	+0.00374	+0.00057	+0.2297
15 35	2881	+0.00064	-0.00468	-0.2695	+0.00480	+0.00059	+0.3345
15 45	2884	+0.00073	-0.00409	-0.2624	+0.00429	+0.00058	+0.3650
15 55	2882	+0.00062	- 0.00453	-0.3821	+0.00427	+0.00070	+0.3556
16 5	2885	+0.00063	- 0.00366	-0.3190	+0.00381	+0.00062	+0.6268
16 15	2890	+0.00076	-0.00223	-0.4323	+0.00209	+0.00073	+0.6516
16 25	2886	+0.00071	- o·oo526	+0.4514	+0.00522	+0.00074	+0.6064
16 35	2891	+0.00071	-0.00643	- 0.0584	+0.00642	+0.00044	+0.3121
16 45	2892	+0.00076	- o·oo516	+0.0281	+0.00504	+0.00064	+0.2962
16 55	2887	+o.ooo86	- o·oo629	-0.1780	+0.00609	+0.00058	+0.2747
17 5	2893	+0.00085	-0.00581	-0.2682	+0.00563	+0.00073	+0.1831
17 15	2888	+0.00053	-0.00711	-0.1484	+0.00723	+0.00046	+0.3093
17 25	2896	+0.00070	-0.00558	-0.2763	+0.00564	+0.00059	+0.0773
17 35	2899	+0.00081	-0.00412	-0.6257	+0.00406	+0.00071	+0.1541
17 45	2894	+0.00083	- o·oo8o8	-0.1959	+0.00797	+0.00063	+0.4366
17 55	2901	+0.00085	– o·oo8o8	-0.4379	+0.00813	+0.00076	+0.3879
18 5	2897	+0.00075	-0.00189	-0.3665	+0.00166	+0.00071	+0.4331
18 15	2902	+0.00076	-0.00445	-0.2697	+0.00447	+0.00071	+0.4374
18 25	2898	+0.00087	- o·oo83o	-0.2223	+0.00796	+0.00078	+0.4125
18 35	2900	+0.00075	-0.00215	-0.2451	+0.00245	+0.00069	+0.4138
18 45	2903	+0.00078	-0.00546	-0.0277	+0.00538	+0.00094	+0.5683
18 55	2904 2608	+0.00080	-0.00490	-0.4891	+0.00491	+0.00088	+0.4806
19 5		+0.00094	-0.00481	-0.0140	+0.00486	+0.00083	+0.3212
19 15	2610	+0.00113	+0.00021	-0.3534	-0.00019	+0.00091	+0.1919
19 25	2617 2618	+0.00063 +0.00080	-0.00778	+0.0193	+0.00774	+0.00075	+0-2023
19 35 19 45	2607	+0.00030	– 0·00387 – 0·00401	- 0·3068 - 0·1810	+0.00405	+0.00081	+0.2240
19 45	2611	+0.00102	-0.00435	-0.4184	+0.00400	+0.00098 +0.00102	+0.1437
i	2623			l .	+0.00450		+0.3311
20 5 20 15	2616	+0.00083 +0.00086	- 0·00455	- 0·9650 - 0·1842	+0.00447	+0.00081	+0-2382
20 15	2619	+0.00080	- 0·00364 - 0·00386	-0·1842 -0·2768	+0.00374 +0.00397	+0.00093	+0·2072 +0·3824
20 35	2612	+0.00074	-0.00104	-0.3233	+0.00119	+0.00082	+0.2981
20 45	2632	+0.00077	-0.00733	-0.2045	+0.00736	+0.00080	+0.2128
20 55	2628	+0.00084	-0.00102	-0.5342	+0.00094	+0.00076	+0.2242
21 5	2633	+0.00089	- 0.00102	-0.5342	+0.00094	+0.00070	+0.0757
21 15	2620	+0.00083	-0.00359	-0.4673	+0.00375	+0.00074	+0.2822
21 25	2630	+0.00099	-0.00618	-0.4736	+0.00597	+0.00083	+0.1065
21 35	2625	+0.00089	- 0.00650	-0.2802	+0.00649	+0.00091	+0.3253
21 45	2614	+0.00060	- 0.00329	-0.3324	+0.00350	+0.00066	+0.3740
21 55	2621	+0.00090	-0.00533	-0.2059	+0.00542	+0.00078	+0.1132
22 5	3 ¹ 73	+0.00073	-0.01188	-0.0902	+0.01181	+0.00074	+0.0482
22 15	2627	+0.00076	- 0.00345	-0.3901	+0.00354	+0.00067	+0.3160
22 25	2622	+0.00104	- 0.00766	-0.2216	+0.00781	+0.00080	+0.3165
22 35	2631	+0.00085	-0.01081	-0.2783	+0.01029	+0.00083	+0.0484
22 45	2637	+0.00086	-0.00050	-0.2284	+0.00065	+0.00071	+0.2201
22 55	2635	+0.00094	- 0.00056	- 0.3566	+0.00043	+0.00085	+0.3172
23 5	2643	+0.00096	- 0.00264	-0.1386	+0.00279	+0.00095	+0.2012
23 15	2638	+0.00102	- 0.00380	-0.2778	+0.00391	+0.00067	+0.3313
23 25	2636	+0.00076	-0.00202	-0.2350	+0.00214	+0.00082	+0.2119
23 35	2644	+0.00100	+0.00130	-0.2564	+0.00143	+0.00082	+0.5182
23 45	2665	+0.00073	-0.00419	-0.2396	+0.00423	+0.00090	+0.3580
23 55	2639	+0.00093	-0.00217	-0.2831	+0.00194	+0.00103	+0.3762
<u> </u>		1			1		

R.A.	Plate No.	A	В	С	D	E	F
h m	PROPERTY OF THE PROPERTY OF TH		To the deprivations in some photocolors become an extension processing about the decision of adultions.				
0 0	3197	+0.00079	-0.00020	-0.2277	+0.00029	+0.00069	+0.2736
0 I0 0 20	2790	+0.00062	-0.00315	-0.1204	+0.00306	+0.00095	+0.1031
0 20	2672 2792	+0.00094 +0.00083	- 0.00544 + 0.00110	-0.0736	+0.00543	+0.00089	+0.2738
0 40	2798	+0.00086	- 0·00534	-0.3912 -0.1551	-0.00111 +0.00532	+0.00087 +0.00089	+0·5952 +0·2913
	2673	+0.00088				-	
0 50 I 0	2793	+0.00080	- 0·00239 + 0·00195	- 0·2446	+0·00244 -0·00187	+0.00093	+0.4676
1 10	2674	+0.00112	- 0·00058	- 0·1910 - 0·4076	+0.00187	+0.00099	+ 0·5973 + 0·3973
I 20	2800	+0.00075	- 0.00350	- o·3353	+0.00359	+0.00077	+0.3218
1 30	2811	+0.00104	-0.00214	-0.3100	+0.00207	+0.00093	+0.3910
1 40	2675	+0.00085	-0.00138	-0.4255	+0.00113	+0.00076	+0.3092
1 50	2678	+0.00001	+0.00174	-0.2706	-0.00186	+0.00078	+0.1844
2 0	2667	+0.00001	-0.00232	-0.4854	+0.00213	+0.00077	+0.3192
2 10	2702	+0.00080	+0.00036	-0.1486	-0.00047	+0.00090	+0.2399
2 20	2676	+0.00084	-0.00117	0·1573	+0.00118	+0.00074	+0.4291
2 30	2679	+0.00099	-0.00343	- 0.3608	+0.00345	+0.00086	+0.1896
2 40	2699	+0.00063	+0.00062	-0.3026	-0.00081	+0.00085	+0.1571
2 50	2668 2680	+0.00096 +0.00076	+0·00264 +0·00069	-0.2238	-0.00259	+0.00082	+0.2255
3 O 3 IO	2700	+0.00070	-0.00455	- 0·3655 - 0·2845	- 0·00076 + 0·00470	+0.00091 +0.00092	+0·4263 +0·1347
l "	1 1	-				_	
3 20 3 30	2703 2693	+0.00087 +0.00092	- 0·00476 + 0·00192	- 0·1329 - 0·5448	+0.00462 -0.00184	+0.00090 +0.00085	+0·3292 +0·0394
3 40	2687	+0.00092	+0.00192	-0.4888	-0.00184	+0.00087	+0.3654
3 50	2688	+0.00065	+0.00300	-0.2836	-0.00331	+0.00076	+0.3708
4 0	2721	+0.00085	+0.00196	-0.3084	-0.00131	+0.00081	+0.2978
4 10	2723	+0.00079	+0.00006	-0.4813	-0.00010	+0.00088	+0.2752
4 20	2729	+0.00088	+0.00026	-0.1517	-0.00002	+0.00093	+0.2523
4 30	3321	+0.00095	-0.00491	-0.3788	+0.00474	+0.00086	+0.4024
4 40	2722	+0.00086	+0.00452	- 0.4460	-0.00453	+0.00092	+0.0565
4 50	2709	+0.00094	- 0.00354	-0.3010	+0.00347	+0.00068	+0.1446
5 0	2724	+0.00079	-0.00137	-0.0549	+0.00141	+0.00001	+0.2461
5 10	2715	+0.00092	+0.00169	-0.2871	-0.00165	+0.00087	+0.3172
5 20	2710	+0·00111 +0·00093	+0.00323	-0.4443	-0.00349	+0.00080	+0.3439
5 30 5 40	2716	+0.00085	-0.00149 +0.00158	-0.3302 -0.4206	+0.00142 -0.00162	+0.00106	+0·3292 +0·1911
	2711	+0.00093	+0.00086	-0.5710	-0.00082	+0.00106	+0.2072
5 50 6 o	2725	+0.00086	+0.00056	-0.1607	-0.00032	+0.00098	+0.3557
6 10	2836	+0.00079	+0.00633	-0.3229	-0.00649	+0.00064	+0.4403
6 20	2735	+0.00100	+0.00246	-0.0680	-0.00252	+0.00087	+0.3467
6 30	2736	+0.00092	+0.00238	-0.3579	-0.00231	+0.00031	+0.3307
6 40	2732	+0.00092	+0.00396	-0.2190	-0.00379	+0.00086	+0.1493
6 50	2726	+0.00093	+0.00075	-0.2868	-0.00077	+0.00081	+0.2190
7 0	2733	+0.00088	+0.00010	-0.3733	-0.00008	+0.00082	+0.4080
7 10	2743	+0.00089	+0.00010	-0.2523	-0.00025	+0.00095	+0.2734
7 20	2737	+0.00080	+0.00483	+0.0706	-0.00500	+0.00081	+0.3542
7 30	2727	+0.00088	+0.00302	-0.2810	-0.00305	+ 0·00097 + 0·00093	+0.3477
7 4º 7 5º	2734 2738	+0.00096 +0.00087	+0.00394 +0.00110	-0.3653 -0.4042	-0.00412 -0.00107	+0.00093	+0·2639 +0·4381
8 0	2728	+0.00083	+0.00056	-0.2591	-0.00053	+0.00075	+0.3077
8 10	2739	+0.00078	+0.00444	-0·258I	-0.00443	+0.00083	+0.3052
8 20	2744	+0.00100	+0.00185	-0.5342	-0.00154	+0.00086	+0.1740
8 30	2740	+0.00069	-0.00035	-0.4403	+0.00042	+0.00074	+0.4498
8 40	2742	+0.00100	-0.00049	-0.1982	+0.00049	+0.00075	+0.1624
8 50	2745	+0.00087	+0.00082	-0.2836	-0.00099	+0.00094	+0.2159
9 0	2746	+0.00092	-0.00082	-0.3050	+0.00066	+0.00105	+0.2457
9 10	2747	+0.00081	-0.00015	-0.4244	+0.00025	+0.00085	+0.2780
9 20	2749	+0.00083	+0.00264	-0.1415	-0.00245	+0.00087	+0.4460
9 30	2748	+0.00090 +0.00082	-0.00447 -0.00262	-0.1978	+0.00456	+ 0·00086 + 0·00095	+0.3308 +0.0518
9 40 9 50	2750 2751	+0.00089	-0.00202	-0.3419 -0.1930	+0.00243	+0.00093	+0.1841
			-	-0.1333		+0.00093	
10 10	2845 2846	+0.00090 +0.00068	-0.00734 -0.00907	-0.1333 -0.0585	+0.00728 +0.00907	+0.00093	+0·3047 +0·3388
10 20	2752	+0.00008	+0.00011	-0.2780	-0.00009	+0.00077	+0.1795
10 30	2853	+0.00084	-0.00454	-0.2787	+0.00436	+0.00093	+0.2959
10 40	2852	+0.00077	-0.00524	-0.4055	+0.00510	+0.00073	+0.4681
10 50	2854	+0.00093	-0.00079	-0.3577	+0.00078	+0.00083	+0.4371
11 0	2859	+0.00087	-0.00085	-0.2843	+0.00088	+0.00097	+0.4951
II IO	2855	+0.00090	-0.00361	-0.0052	+0.00364	+0.00071	+0.2096
II 20	3327	+0.00072	-0.00358	-0.0152	+0.00354	+0.00063	+0.2662
11 30	2856	+0.00070	-0.00347	-0.2637	+0.00336	+0.00075	+0.2012
11 40	2861	+0·0006I	-0.00097	-0.3470	+0.00082	+0.00084	+0.4725
11 50 12 0	2857 2865	+0.00065 +0.00081	-0.0022I	-0.3158	+0.00215	+ 0·00058 + 0·00067	+0.2228
12 0 12 10	2873	+0.00057	- 0·00338 - 0·01030	-0·1722 -0·4192	+0.00343	+0.00062	+0·4974 +0·4725
12 20	2866	+0.00057	-0.00297	-0.5221	+0.00397	+0.00065	+0.4108
	1.			1	1		1

R.A.	Plate No.	A	В	C .	D	E	F
h m						1	1.0.7702
12 30	2862	+0.00097	-0.00017	-0.2845	-0.00004	+0.00092	+0.5192
12 40	2874	+0.00066	-0.00146	-0.4366	+0.00142	+0.00080	+0.4150
12 50	2863	+0.00089	-0.00382	- 0.4069	+0.00398	+0.00060	+0.4013
13 0	2867	+0.00075	-0.00390	-0.2182	+0.00386	+0.00056	+0.4169
13 10	2875	+0.00061	-0.00058	- o·3o46	+0.00068	+0.00072	+0.4864
13 20	2869	+0.00054	+0.00022	- o·3574	+0.00001	+0.00058	+0.6148
13 30	2870	+0.00065	-0.00259	-0.3522	+0.00290	+0.00047	+0.4777
13 40	2876	+0.00086	-0.00857	-0.1271	+0.00856	+0.00084	+0.2709
13 50	2889	+0.00075	-0.00206	– o·3816	+0.00209	+0.00074	+0.3871
14 0	2877	+0.00056	-0.00582	-0.3522	+0.00564	+0.00064	+0.2990
14 10	2878	+0.00060	-0.00306	-0.2912	+0.00321	+0.00054	+0.3264
14 10	3364	+0.00088	-0.00138	-0.3150	+0.00120	+0.00070	+0.4066
14 30	3392	+0.00090	-0.00576	-0.4256	+0.00539	+0∙00064	+0.2691
		+0.00096	-0.00517	-0.2737	+0.00476	+o·ooo86	+0.2196
	3373	+0.00093	-0.00230	-0.2882	+0.00230	+0.00081	+0.2297
14 50	3374	-	1	-0.2484	+0.00583	+0.00058	+0.3852
15 0	3393	+0.00089	-0.00576			+0.00063	+0.0157
15 10	3384	+0.00067	-0.00415	- o·2678	+0.00404	+0.00068	+0.2728
15 20	3394	+0.00074	-0.00276	-0.3102	+0.00270	1	+0.1149
15 30	3375	+0.00063	-0.00752	-0.0224	+0.00739	+0.00074	+0.2831
15 40	3385	+0.00069	- 0·00649	-0.2504	+0.00604	+0.00091	1
15 50	3395	+0.00095	-0.00516	- 0.4466	+0.00526	+0.00084	+0.2330
16 0	3407	+0.00067	-0.00369	-0.2314	+0.00385	+0.00060	+0.4130
10 10	3396	+0.00074	-0.00428	-0.2178	+0.00399	+0.00079	+0.3581
16 20	3376	+0.00087	-0.00850	-0.1066	+0.00834	+0.00071	-0.1311
16 30	3386	+0.00098	-0.00544	- 0.0864	+0.00566	+0.00068	+0.0044
16 40	3397	+0.00088	-0.00781	- 0.2763	+0.00766	+0.00086	+0.5116
		+0.00075	-0.00210	-0·2516	+0.00520	+0.00072	+0.0596
1	3377	+0.00076	-0.00549	-0.2322	+0.00570	+0.00094	+0.3212
17 0	3416	+0.00070	-0.00349	-0.2259	+0.00409	+0.00081	+0.4721
17 10	3398	+0.00030	- 0·00561	-0.2115	+0.00571	+0.00089	+0.2688
17 20	3437	1	_	-	1		1
17 30	3417	+0.00077	- 0.00674	-0.2348	+0.00662	+0.00064	+0.1878
17 40	3424	+0.00070	-0.00543	-0.2392	+0.00537	+0.00097	+0.3371
17 50	3434	+0.00075	– 0·00576	-0.1960	+0.00578	+0.00082	+0.3747
18 0	3439	+0.00087	-0.00841	-0.2270	+0.00842	+0.00084	+0.1655
18 10	3418	+0.00087	-0.00186	- 0∙ 0858	+0.00155	+0.00078	+0.4256
18 20	3425	+0.00092	-0.00938	-0.0618	+0.00915	+0.00072	+0.2629
18 30	3440	+0.00086	-0.01036	-0.2438	+0.01044	+0.00083	+0.3486
18 40	3441	+0.00078	-0.00600	-0.2349	+0.00622	+0.00091	+0.2006
18 50	3442	+0.00075	-0.00621	- o·3787	+0.00622	+0.00066	+0.0892
19 0	2756	+0.00088	- 0.00567	-0.1588	+0.00567	+0.00086	+0.2060
19 10		+0.00095	-0.00908	-0.1622	+0.00018	+0.00000	+0.3403
19 10	2779 2773	+0.00082	-0.00601	-0.2180	+0.00310	+0.00081	+0.2573
19 30	2785	+0.0002	- 0.00340	-0.1601	+0.00369	+0.00101	+0.2161
19 40		+0.00070	-0.00545	-0.2044	+0.00309	+0.00102	+0.3518
	2774	+0.00072	-0.00662	-0.0835	+0.00639	+0.00080	+0.0920
19 50	2757				-		
20 0	2775	+0.00083	-0.00350	-0.2882	+0.00348	+0.00102	+0.4012
20 10	2786	+0.00090	- 0.00668	-0.1634	+0.00662	+0.00092	+0.2837
20 20	2760	+0.00072	-0.00910	-0.3327	+0.00913	+0.00106	+0.2153
20 30	2762	+0.00068	-0.00308	-0.2462	+0.00325	+0.00084	+0.2775
20 40	2769	+0.00031	- 0.00970	-0.1426	+0.00972	+0.00088	+0.3036
20 50	2763	+0.00063	- 0.00478	-0.2124	+0.00468	+0.00081	+0.3669
21 0	3175	+0.00078	-0.00953	-0.1814	+0.00955	+0.00090	-0.0096
21 10	2771	+0.00087	- 0.00485	-0.3083	+0.00501	+0.00082	+0.0995
21 20	2776	+0.00076	- 0.00565	+0.0330	+0.00560	+0.00097	+0.3918
21 30	2772	+0.00084	~0.00190	-0.1254	+0.00227	+0.00096	+0.2500
21 40	2764	+0.00070	- 0.00938	-0.1327	+0.00960	+0.00090	+0.2969
21 50	2777	+0.00077	-0.00600	-0.0957	+0.00577	+0.00086	+0.3838
22 0	2787	+0.00087	-0.00741	-0.2370	+0.00745	+0.00098	+0.1507
22 10	2778	+0.00085	-0.00617	-0.3939	+0.00609	+0.00093	+0.1804
22 20	2780	+0.00081	-0.00184	-0.3001	+0.00178	+0.00073	+0.3587
1	-1			_		+0.00088	+0.1608
22 30	2788	+0.00061	- 0.00206	-0.6760	+0.00216		
22 40	2781	+0.00092	-0.00352	-0.4040	+0.00336	+0.00077	+0.2473
22 50	2782	+0.00080	-0.00192	-0.2043	+0.00196	+0.00090	+0.3797
23 0	2765	+0.00085	-0.00535	-0.0011	+0.00527	+0.00085	+0.1227
23 10	2783	+0.00081	- 0.00459	-0.0089	+0.00448	+0.00092	+0.2187
23 20	2789	+0.00092	-0.00001	+0.0202	-0.00002	+0.00082	-0.0149
23 30	2766	+0.00071	-0.00092	-0.3314	+0.00101	+0.00083	+0.5322
23 40	2791	+0.00083	-0.00251	-0.1760	+0.00261	+0.00075	+0.2386
23 50	2784	+0.00083	-0.00416	-0.1180	+0.00413	+0.00069	+0.3592
- I <u></u>		<u> </u>	1,	1			
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R.A.	Plate No.	A	В	С	D	E	F
h m							
0 5	2797	+.00099	00327	- •2660	+ 00316	+.00077	+ • 4472
0 15	2804	+.00091	00387	- • 3876	+.00359	+.00077	+.5959
0 25 0 35	2805 3174	+·00082 +·00075	00109	5016	+·00107 +·00435	+·00083 +·00073	+·4545 +·2229
0 45	2806	+ .00075	- ·00449 - ·00712	-·1354 -·3819	+ .00699	+.00094	+ .2650
15	2810	-	-	-·2659		+.00088	+.5262
O 55 I 5	2799	+·00092 +·00070	+·00016 -·00644	-·2059 -·1840	- ·00027 + ·00650	+.00087	+ · 3567
1 5 1 15	2807	+.00070	00044	- 3374	+.00030	+·00081	+ .4387
I 25	2818	+.00083	00696	- •2403	+.00675	+.00088	+.3963
I 35	2794	+.00078	+.00012	-·4076	00025	+.00081	+.2730
I 45	2801	+ 00084	+.00056	- •3934	00058	+.00087	+.5946
I 55	2809	+.00078	+.00195	4333	00192	+.00084	+ 5942
2 5	2795	+ .00072	00063	3159	+.00062	+.00086	+.6023
2 15	2812	+.00092	00207	0426	+ 00215	+.00104	+.3144
2 25	2802	+ .00082	+·00601	-∙3 68o	00604	+.00084	+.4091
2 35	2796	+ .00087	+.00296	2841	- 00283	+.00081	+.4848
2 45	2803	+.00072	00165	- •2696	+.00171	+.00050	+.4613
2 55	2813	+ •00097	00533	1284	+.00490	+-00078	+ 4235
3 5	2819	+.00081	00468	0541	+.00466	+·00082 +·00082	+.3639
3 15	2814	+ .00079	00148	- •0968	+.00132		+ 3576
3 25	2820	+.00063	00495	0342	+.00491	+.00069	+.4489
3 35	2815	+.00082	00261	-·208I	+.00234	+·00088 +·00063	+·3558 +·3769
3 45	2816 2821	+·00070 +·00085	-·00385 +·00115	- ·8694 - ·3926	+·00370 -·00116	+.0003	+ 3120
3 55 4 5	2821	+.00088	00246	-·2694	+.00238	+.000/9	+.5889
	2823	+ .00033	- 00313	1530	+ 00315	+ 00080	+ 4544
4 15	2824	+.00103	00313	0756	+ 00493	+.00078	+.3858
4 ² 5 4 35	2829	+ .00082	+ 00005	3696	00026	+ 00086	+.1074
4 45	2825	+ .00074	00465	1490	+.00450	+.00078	+ 3712
4 55	2826	+.00090	+.00284	-·233I	00272	+.00066	+ .7053
5 5	2827	+.00087	+.00077	1323	00081	+.00089	+.3976
5 15	2830	+.00093	+.00153	3992	00132	+.00085	+.3427
5 25	2828	+.00084	00696	- 4511	+.00694	+.00089	+ .3852
5 35	3230	+ .00079	+.00220	- 1494	00235	+.00057	+ 4450
5 45	2831	+.00087	+.00287	3839	00312	+.00080	+ 5185
5 55	2832	+.00076	+.00180	3788	00182	+.00082	+ 5214
6 5	2833	+.00079	+.00011	4253	00017	+ .00075	+ 4312
6 15	2837	+ 00078	+.00551	2044	00564	+ 00078	+ 3434
6 25	2834	+ .00080	00084	- 4494	+.00078	+·00049 +·00071	+·4234 +·2882
6 35	2838	+.00084	00143	0545	+·00T39	1	•
6 45	2839	+.00085	+ 00178	4113	00192	+.00073	+ • 4873
6 55	2840	+.00085	+.00160	-·3740 -·3256	-·00166 -·00173	+.00081	+·4072 +·2724
7 5	3231	+·00085 +·00098	+·00169 -·00074	2163	+.00084	+ .00070	+ .5402
7 15	2841 2842	+.00095	00543	- • 2379	+.00527	+.00077	+.2824
7 25	2042	+.00069	+.00114	1443	00123	+.00069	+ • 5741
7 35	2843 2844	+.00088	00100	2359	+.00087	+.00070	+ 4235
7 45 7 55	2848	+.00079	+.00185	3356	-·oo186	+.00084	+ 3683
8 5	3239	+.00098	00150	1183	+.00142	+.00079	+ .2981
8 15	2849	+.00092	00233	3538	+.00238	+.00087	+ 2214
8 25	2850	+.00098	+.00656	5722	- 00684	+.00076	+-4566
8 35	3242	+.00080	+.00020	1239	-·0002I	+.00100	+ 2662
8 45	3244	+.00094	+.00136	1646	00169	+ .00081	+ .2814
8 55	3247	+.00084	00227	- 3366	+.00221	+.00085	+ 1416
9 5	3250	+.00081	00016	3048	00008	+.00075	+ 4042
9 15	3254	+.00081	+.00219	3116	00233	+.00074	+ 2222
9 25	3252	+.00081	+.00103	- 4536	00121	+.00075	+ 4486
9 35	3323	+.00104	00428	-·0698	+·00428 -·00372	+.00065	+·3480 +·4360
9 45	3334	+·00095 +·00080	+ .00354	-·2997 -·1135	+.00004	+.00078	+.3566
9 55	3329		_	+.1644	00252	+.00068	+ 4166
10 5	3324	+.00099	+.00241	1874	+.00019	+.00094	+ 2535
10 15 10 25	3335	+ 00108	-·00039 +·00218	- 2853	- 00228	+.00074	+.4520
10 25	33 ² 5 3 ² 59	+ 00075	00646	1883	+.00648	+.00074	+ .4529
10 45	3345	+.00074	00234	0687	+ 00228	+.00088	+ .2954
10 55	3337	+.00065	00081	2671	+.00077	+.00092	+.3110
11 5	3337	+.00073	00673	1558	+.00679	+.00065	+.3357
11 15	3336	+.00078	+:00099	3652	00074	+.00092	+.3963
11 25	3328	+ 00070	+.00062	3293	00068	+.00078	+ 4474
11 35	3348	+.00070	+.00009	- •2794	00015	+.00077	+ • 4073
11 45	3353	+.00078	00104	2700	+.00102	+.00073	+ .2923
11 55	3338	+.00090	00317	-·I744	+.00304	+ .00071	+ 3397
12 5	3359	+.00111	00686	1431	+.00684	+.00089	+.2261
12 15	3378	+.00054	00440	- ·242I - ·0881	+·00426 +·00551	+.00080	+·3664 -·1193
12 25	3343	+.00098	00531	0001	T 00331	1 00000	- 193

12 33 3344	R.A.	Plate No.	A	В	С	D	E	F
12 45 3355 + -00099	1						1,00066	.07.50
12 55 3366 +-00069 00370 1560 +-00472 +-00073 +-0081 0345 0081 0081 0081 0081 0083 0038 0038 0038 0038 0038 0038 0038 0038 0081								
13 5 3366 +-00069005730058 +-00069005180006900519005190006900519000690051900519000690051900519000690051900519000690051900519005190006900519005190006900519005		3355						
13 5 3366 +-00069005730058 +-00069005180006900519005190006900519000690051900519000690051900519000690051900519000690051900519005190006900519005190006900519005	12 55	3367	+.00095	00439	- • 1564	+.00427	+ .00073	+.0224
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R.A.	Plate No.	A	В	С	D	E	F
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	3279	+.00051	00618	-·o358	+.00624	+.00104	+.0502
-	3290	+ .00078	00406	- •2282	+.00403	+.00092	0090
0 18	3294	+ •00086	00194	3528	+.00187	+.00081	+:3743
0 27	3291	+.00114	00202	1912	+.00177	+.00104	+.3724
0 36	3300	+ .00080	- •00225	3130	+.00215	+•00088	+.2542
0 45	3292	+.00086	- •00095	2510	+.00119	+.00090	+.1050
0 54	3295	+ •00106	- ∙00506	- • 1876	+.00505	+.00100	+.2131
1 3	3286	+ •00088	00144	4710	+.00139	+.00099	+.3518
1 12	3296	+ .00093	00368	2766	+.00349	+ 00087	+.4028
1 21	3501	+ .00090	00530	-·o158	+.00516	+.00114	+.3190
т 20	3287	1.000#6			-		
1 30		+ .00076	00257	1334	+.00262	+.00077	+ 4029
1 39	3293	+ •00096	+.00254	- 1457	00255	+ .00097	+.0782
148	3281	+.00051	00136	- • 1549	+.00160	+.00080	+.3376
I 57	3297	+ .00000	00237	3021	+.00220	+ .00088	+.3364
2 6	3301	+ •00080	00197	- 1693	+.00179	+.00092	+.4028
2 15	3298	+ .00087	00062	- ∙ 0948	+.00062	+.00097	+.2680
2 24	3302	+.00109	00277	3521	+.00256	+.00077	+ .2755
•							
	3303	+ .00086	+.00121	3778	00119	+.00098	+ • 2959
2 42	3299	+.00087	00112	- •3466	+.00100	+.00101	+.3223
2 51	3304	+ -00101	+.00039	3736	00048	+.00107	+ 4726
3 0	3305	+ .00094	+.00012	3714	00006	+.00090	+ 4437
3 9	3312	+ .00089	00140	1899	+.00140	+.00089	+ 2092
3 18	3306	+ .0009	+.00328	3366	00318	+ 0009	+ 2650
٠,	1		-				
3 27 3 36	3313	+·00071 +·00077	+·00194 -·00061	-·3997 -·2506	- ·00211 + ·00069	+·00094 +·00098	+·2827 +·1839
			0				
3 45	3314	+ .00094	00189	-·3T55	+.00188	+.00083	+ 3178
3 54	3320	+-00078	+.00040	4782	00048	+.00097	+.3127
4 3	3315	+.00074	+.00384	- •4639	00394	+.00088	+.3641
4 12	3316	+.00095	+.00283	3264	00282	+.00092	+.4585
4 21	3309	+ .00094	00312	2206	+.00299	+.00089	+.3300
					20070		1 2626
4 30	3317	+ .00074	+·00176 +·00269	- ·2091 - ·3998	- ·00210 - ·00292	+·00084 +·00085	+ .2606
4 39	3310	+.00083	-		-		+ .4937
4 48	3322	+.00082	00229	2081	+.00199	+.00088	+.3162
4 57	3311	+.00099	+.00048	- • 2786	00055	+.00104	+ .3847
5 6	3233	+.00001	00089	- •3558	+.00075	+.00100	+ 4415
5 15	3234	+.00097	+.00350	2160	- 00368	+.00095	+.3462
			00597	1099	+ 00581	+.00098	+.3405
5 24	3235	+.00100					
5 33	3236	+.00076	+.00462	3585	00464	+.00089	+.3667
5 42	3237	+.00093	00183	1950	+.00193	+.00080	+ 4757
5 51	3238	+.00073	+.00231	1822	00213	+.00098	+.4650
6 o	2522	+.00096	- 00188	-·r553	+.00178	+.00100	+.4561
6 9		+.00096	00189	1956	+.00168	+.00102	+.3890
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6 18	2528	+.00089	+.00055	- 2985	00056	+.00110	+ 4334
6 27	2532	+.00093	00187	1048	+.00184	+.00103	+.3027
6 36	2523	+.00094	+.00153	2459	00172	+.00105	+.4119
6 45	2525	+.00099	+.00374	3334	- 00366	+.00104	+.3863
6 54	2533	+.00083	+.00452	3682	00449	+.00086	+.5430
	2534	+.00088	+.00092	1713	00077	+.00080	+.3311
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7 I2 7 2I	2526 2535	+·00092 +·00077	+·00642 +·00385	1976	00390	+ 00104	+·4933 +·5234
, ~	-555						
7 30	2530	+.00082	+.00057	3106	00076	+.00100	+ 4455
7 39	2536	+.00088	+.00022	2463	00020	+.00102	+ 3240
7 48	2527	+.00076	+.00237	3197	- 00231	+.00089	+ 4505
7 57	2531	+.00100	+.00178	- •2956	- 00187	+.00097	+.3612
8 6	2537	+.00095	+.00378	3948	00378	+.00081	+.3463
Q	2010	1.00000	+.00020	1662	00028	+.00100	+-4036
8 15	3240	+.00089			00298	+.00089	
8 24	3241	+.00084	+.00298	- 3461		T 00009	+.5440
8 33	3243	+.00094	00003	3416	00036	+.00084	+.2958
8 42	3245	+.00088	00643	3033	+.00010	+.00108	+.1437
8 51	3246	+ 00097	00374	2949	+.00396	+.00090	+ 3496
9 0	3333	+.00083	00049	2018	+.00041	+.00086	+.4613
-		+.00083	+ 00164	4616	00149	+.00085	+ 2760
9 9	3251						
O 78	3255	+.00099	00195	1899	+.00194	+.00094	+.2647
9 18		+.00076	+.00135	2913	00156	+.00078	+.3392
9 27 9 36	3248 3702	+.000/0	00071	3266	+.00080	+.00069	+.2870

	R.A.	Plate No.	A	В	C ·	D	E	F
1	h m							0
1	9 45	3253	+.00083	00117	1909	+.00101	+.00079	+.2384
	9 54	3660	+.00072	00139	- •2226	+.00105	+.00106	+.2641
	10 3	2560	+.00090	000II	- •3285	+·0002I	+.00070	+.4220
	10 12	2568	+.00078	00333	2622	+.00327	+.00079	+.3578
	10 21	3704	+.00083	+.00084	 ∙0850	00081	+.00100	+.3652
	10 30	3332	+.00081	+.00047	2468	00062	+.00098	+ 2568
	10 39	3783	+ 00083	00118	- •2361	+.00110	+.00087	- 0285
	10 48	3340	+.00068	00113	2926	+.00111	+.00066	+.1397
	10 57	2569	+.00082	00420	1447	+.00405	+.00074	+.4738
chronical	11 6	3346	+.00083	00424	3808	+.00414	+•00086	+.2070
	II I5	3341	+.00085	-·00077	1762	+.00074	+.00074	0898
1	II 24	3347	+.00074	00100	- 3438	+.00079	+.00082	+.3793
		3358	+.00047	00119	1981	+.00124	+.00085	+.3706
	00		+.00047	00168	- 3525	+.00157	+.00078	+.2417
	II 42 II 51	3342 3349	+.000/0	00736	-·I275	+.00739	+.00102	+.3207
					.7.00.7	1,00000	-1.00070	4.5056
	12 0	3354	+.00073	00275	-·I295	+.00239	+.00079	+.5056
	12 9	3707	+.00105	-·00436	1294	+.00434	+.00070	+.5463
1	12 18	3360	+.00079	- •00271	2950	+.00265	+.00068	+.3666
1	12 27	3350	+.00094	- •00294	1207	+.00287	+.00083	+.5132
	12 36	3351	+.00086	00402	1366	+.00413	+.00085	+.4823
	12 45	3361	+.00077	- •00449	- 2127	+.00451	+.00065	+.4619
	12 54	3352	+.00094	00226	3189	+.00208	+·00081	+.3957
1	13 3	3708	+.00094	00410	- 0892	+.00399	+.00101	+.3168
	13 12	3379	+.00100	00796	0905	+ 00772	+.00065	+.3266
	13 21	3380	+.00064	00458	4242	+.00454	+.00075	0069
	13 30	3389	+.00070	- ∙00588	+.9127	+.00605	+.00073	+·5391
1	13 39	3381	+.00080	00398	- 4027	+.00397	+.00098	+ 1894
1	13 48	3388	+.00085	00562	3220	+.00541	+.00088	+.3172
			+.00072	00502	0447	+.00612	+.00086	+.2467
	13 57	3390			1	+.00605	+ 00091	+.4135
	14 6	3400	+.00077	- ∙ 00635	3165	50005	, 55591	
	14 15	3382	+.00098	00262	- 2560	+.00238	+.00075	+.1313
1	14 24	3403	+.00073	00644	1319	+.00606	+.00069	+.3508
	14 33	3409	+.00075	01034	0078	+.01044	+.00079	+.3048
1	14 42	3383	+.00068	00567	3582	+.00572	+.00062	+.2686
	14 51	3410	+.00077	- 00872	1890	+.00864	+-00071	+.2996
	15 0	3411	+.00095	00496	2291	+.00491	+.00083	+.3320
1	15 9	3419	+.00062	00944	0719	+.00899	+.00071	+.3088
1	15 18	3428	+.00077	- 00588	-·787ī	+.00599	+-00077	+.3458
	15 27	3412	+.00069	00515	1310	+.00509	+.00082	+ 1993
	15 36	3429	+.00091	00467	3405	+.00467	+.00078	+.3921
	TE 15	3413	+.00098	- ∙ 00388	- •2557	+.00380	+.00127	+-3300
1	15 45		+.00081			+.00300	+.00081	+.0482
1	15 54	3578	1 - 1	00310	-:5347	1	+.00081	+.3827
1	16 3	3414	+.00081		-·3495	+.00522		
	16 12	3559	+.00071	-·00395	-·3835	+.00381	+·00073 +·00063	+:3322
	16 21	3415	+.00082	00804	1582	+.00764	7-00003	+:3322
	16 30	3432	+.00093	00530	3378	+.00511	+.00093	+.3629
1	16 39	3561	+.00062	- •00846	2891	+.00841	+.00086	+.2102
1	16 48	3566	+.00082	00550	- 3307	+.00515	+.00076	+.3493
1	16 57	3570	+.00067	00620	- 4574	+.00585	+.00086	+.3369
	17 6	3433	+.00072	00727	0906	+.00697	+ .00075	+ • 3254
1	17 15	3567	+.00090	00815	5292	+ 00832	+.00085	+ 1576
1	17 24	3571	+.00088	- 00771	3687	+.00768	+.00083	+.1739
1	17 33	3568	+.00081	00699	1911	+.00686	+.00076	+.3769
	17 42	3572	+.00083	00666	2694	+.00659	+.00074	+.2317
	17 51	3569	+.00070	- 01143	3006	+.01128	+.00073	+.3911
	18 o	3573	+.00054	00543	2523	+.00534	+ .00070	+.2698
1	18 9	3581	+.00091	00762	- 1469	+.00785	+ .00084	+ • 4037
1	18 18	3913	+.00088	00607	2174	+.00622	+.00082	+.0768
	18 27	3592	+-00079	00820	1540	+.00834	+.00094	+ 2704
	18 36	3594	+.00097	00862	1535	+.00857	+.00096	+.0698
	18 45	3593	+.00102	01162	1708	+.01188	+ .00097	+ · 3258
	18 54	3589	+.00072	00407	- 4016	+.00411	+.00082	+ • 4464
	19 3	3459	+.00066	00972	4622	+ 00973	+.00095	0310
	19 12	3463	+.00081	00668	- 2085	+.00640	+.00086	+.2778
	19 21	3468	+.00080	01049	1753	+.01051	+.00115	0637
	-	1 .		1	'33	Ĭ .		

R.A.	Plate No.	A	В	С	D	E	F
h m	2.62	1 22276	2200	2060	1.000	1.00076	+.2847
19 30	3460	+.00056	00889	-•1962	+.00870	+.00076	
19 39	3474	+.00085	00990	3370	+.00986	+.00093	+·0125 +·2066
19 48	3464	+.00107	00674	1884	+.00698	+.00115	
19 57	3469	+.00076	00848	- •2560	+.00845	+.00099	+.3921
20 6	3475	+.00084	00956	1374	+.00956	+.00100	+•1487
20 15	3465	+.00084	00421	-•1336	+.00422	+.00101	+•4326
20 24	3470	+.00089	00847	- •2049	+.00849	+.00106	+•2489
20 33	3477	+.00076	00887	5124	+.00881	+.00094	+.0182
20 42	3466	+.00087	00211	- •2870	+.00207	+.00093	+•2622
20 51	3471	+.00085	00808	-·4615	+.00804	+.00092	+•0648
21 0	3484	+.00093	00307	3011	+.00303	+.00104	+.3024
21 9	3467	+.00088	00764	- •1393	+.00758	+.00116	+ 1714
21 18	3472	+.00092	00385	-·I349	+.00413	+.00080	+ • 1657
21 27	3482	+.00092	00544	- • 5996	+.00538	+.00085	+ 1151
21 36	3457	+.00091	00756	-·3368	+.00773	+.00093	+.1769
21 30	3437	, 00091	00/,50	3300	1 1/13	,55	,,,
21 45	3473	+.00071	00312	- • 1165	+.00296	+.00092	+.2216
21 54	3458	+.00085	00636	1158	+ 00632	+.00083	+ .2617
22 3	3273	+ 00072	- 00550	2022	+ .00552	+.00082	+.0573
22 12	3282	+ 00085	00709	2119	+ 00707	+.00099	+.2647
22 21	3274	+.00077	00884	-·o79́8	+ .00890	+.00090	+.2402
00.00	3283	+-00085	00823	0157	+.00813	+.00099	+.2338
22 30	3288	+.00104	00612	- 1157	+.00618	+.00091	+ 2598
22 39	1 "	•	00345	2829	+ .00346	+.00091	+.1176
22 48	3277	+.00079	0.10		+.00488	+.00115	+.1664
22 57	3289	+.00093	00501	- •1536	+.00400	+.00092	+.5987
23 6	3195	+.00094	00704	- •1769	+ ·00090	+ 00092	7 3907
23 15	3196	+.00106	00525	2603	+.00505	+.00074	+.2862
23 24	3284	+.00076	-·oo88ï	- 1458	+.00861	+.00099	+.3847
23 33	3276	+.00077	00166	2718	+ 00131	+.00087	+.8853
23 42	3278	+.00064	00385	1862	+.00374	+.00083	+.1036
23 51	3285	+.00078	00236	2448	+.00251	+.00098	+.4027
J J	3,	,		1			

TABLE V.—DIFFERENCES (HYDERABAD—PRAGER) OF OVER 1"-8 IN EITHER CO-ORDINATE 15

Unit ·oor of a reseau interval

	Prager		I	Hyderabad			Prager		I-	Iyderabad	
No.	Mag.	Epoch	Epoch	Δξ	$\Delta\eta$	No.	Mag.	Epoch	Epoch	Δξ	$\Delta\eta$
96 153 242 722 854	9·23 7·94 7·75 5·97 9·02	1900 + 20·2 19·7 20·3 20·8 20·8	1900 + 30·9 33·0 28·9 30·9 29·5	- 6 0 + 8 + 7 + 6	- 3 + 8 - 14 + 1 - 8	5174 5191 5262 5331 5332	9.45 9.67 8.16 10.12 9.06	1900 + 19·8 19·8 20·4 19·8 19·7	1900 + 31·8 33·3 33·2 33·2 28·4	- 6 - 6 + 6 0 + 2	- I + I + 2 - 6 - 7
920 1136 1331 1512 1546	8·55 8·08 7·8 8·58 5·71	20·4 20·0 20·4 20·4 20·9	33·0 33·0 33·0 33·0 29·6	+ 9 + 7 + 6 + 77 + 3	- 7 - 5 - 7 -58 - 6	5335 5384 5397 5409 5425	8·70 9·85 9·33 9·68 5·79	19·7 19·8 19·4 19·4 20·0	33·3 33·2 33·2 30·8 33·2	+ 7 - 6 0 - I - 7	- 3 + 2 - 8 - 6 + 4
1595 1625 1773 2468 2523	8·43 9·24 9·34 9·35 8·82	20·I 20·5 20·I 21·0 20·I	31.0 29.6 31.5 29.5 28.2	- I + 3 + 2 - I + 2	- 7 - 6 - 6 - 8 - 6	5481 5520 5521 5581 5749	5·8 8·96 9·31 7·19 9·56	19·8 19·8 19·7 19·7	28·4 30·3 33·3 33·3 31·8	+ I - 6 + 2 - IO + 2	+ 16 - 12 - 9 0 - 9
2631 2889 3038 3180 3312	8-94 6-91 6-85 6-29 8-36	20·6 21·1 21·1 21·1 20·2	29·1 29·0 28·2 31·2 32·2	0 + I + I - 8 - 5	- 6 - 17 - 10 + 2 - 8	5793 5825 5882 5884 5920	5.09 8.82 8.13 8.72 9.58	19·4 19·4 20·2 19·4 19·5	33·3 34·3 33·3 31·8 33·3	+ 5 -13 - 4 + 8 + 2	-21 + 6 - 9 -22 + 7
3344 3478 3509 3558 3600	7·80 8·93 9·56 5·70 6·18	21·1 20·6 20·6 20·7 20·7	32·5 32·2 32·2 32·2 35·3	- 6 - 9 + 6 - 18 + 6	+ I + I - 2 - 7 - 6	5924 6047 6078 6213 6339	8·18 9·85 9·35 8·96 9·4	19·5 19·4 19·4 19·4	30·3 33·3 33·8 34·7 34·3	- 3 - 8 + 6 - 20 + 1	+ 7 + 4 0 + 9 + 6
3653 3706 4066 4110 4141	8·36 9·69 5·53 8·31 9·52	20·6 20·6 20·7 20·2	32·2 34·2 28·3 29·7 33·2	+ 12 + 2 0 - 6 + 4	- 4 - 6 + 8 + 2 - 22	6375 6408 6466 6519 6529	9·52 9·66 8·5 9·68 8·11	19·5 19·5 19·4 19·5 19·8	30·4 30·4 33·8 30·3 30·3	- 6 - 6 - 25 - 5 + 3	- 2 + 2 - 38 - 13 + 7
4226 4239 4286 4302 4354	8-92 5-66 8-5 10-16 10-37	20·7 20·3 20·3 20·7 21·1	28·3 28·3 33·2 28·3 30·3	+ 7 - 7 - 8 - 3 - 6	- 3 + 8 - 2 - 6 + 3	6569 6653 6658 6812 7175	9·30 8·32 7·12 9·1 8·64	19·8 19·5 19·6 19·7	33.8 34.3 34.3 33.8 33.8	- 4 - 6 + 2 - 2 + 2	- 7 + 5 - 6 + 6 + 6
4440 4498 4514 4568 4577	9·86 8·43 9·50 8·3 8·52	19·8 20·3 19·8 20·3 20·6	33 ² 28 ³ 34 ³ 29 ³ 30 ⁶	+ 7 + 6 - 8 - 21 + 6	- 2 + 2 - 2 + 5 - 2	7298 7372 7422 7669 7984	8·26 5·78 5·25 9·21 9·56	19·7 20·0 19·7 19·7 19·8	29·3 33·9 33·9 33·9 33·9	- 8 - 13 + 4 + 8 - 3	0 -23 + 6 0 -II
4641 4663 4688 4868 4883	9.59 10.20 6.3 8.28 9.12	20·4 19·9 19·9 19·8 19·9	33°2 30°2 29°3 33°2 33°2	- 8 + 4 - 10 + 14 + 6	+ 5 - 6 + 12 - 7 0	8029 8156 8554 8573 8633	9·28 9·3 9·36 10·15 10·17	20·1 19·8 20·0 19·7 20·4	30·9 33·0 28·9 32·4 28·9	+ 7 + 8 + 6 - 6 + 6	+ 2 0 - I + 2 + 2
4897 4939 4971 5007 5027	8·49 10·33 9·52 9·50 10·5	19·9 19·8 19·8 19·8	31·7 33·2 29·3 33·2 29·3	+ 6 + 10 0 - 6 - 6	- I - 6 + I - I	8666 8689 8718	6·53 7·50 9·48	20·3 19·7 19·8	32·4 32·9 32·9	+12 + 6 +10	+ 4 + 2 - 5
5°33 5°73 51°04 51°07 5133	10·33 9·0 9·12 8·48 8·94	19·9 19·8 19·8 19·8	29·3 33·2 32·5 33·2 28·4	+ 8 - 6 + 1 - 8 - 2	+ 2 0 - 6 - 2 + 6						

NOTES.

NT -	Star	Proper	Motion	Remarks
No.	Star	R.A.	Dec.	
722 1512 1546 3180 3558 3600 4066 4239 4568 4688 5425 5481 5520 5793 5825 7372 7422	56 Andr 50 Pers 32 Lync 11 L Min 13 L Min 49 U Maj 57 U Maj 10 C Ven 40 Böot 11 Cor Bor 27 Cygn 29 Cygn	"+0·181 +2·134 +0·168 -0·141 -0·705 -0·015 -0·051 -0·051 -0·355 -0·213 -0·032 -0·105 -0·012 -0·225 -0·232 +0·064	"+0.008 -1.348 -0.200 -0.006 -0.251 -0.055 -0.026 +0.009 +0.05 +0.132 +0.087 +0.031 -0.33 -0.356 +0.07 -0.438 +0.068	Double ADS 1534 N.G.C. Binary 7 ^m ·3–9 ^m ·0 Binary ADS 7441 Binary ADS 8175
7422 8666	29 Cygn	+0.064 +0.230	+0.008 +0.026	